Special Issue

Novel Insights into Lipid Metabolism in Aquatic Animals

Message from the Guest Editor

Lipids are a highly effective non-protein energy source for aquatic animals. Dietary incorporation of lipids can spare the use of protein, thereby reducing feed cost and nitrogenous discharge into water. However, several challenges have yet to be overcome. Specifically, efforts should be made to (1) systematically unveil the molecular mechanisms underlying lipid homeostasis in aquatic animals; (2) assess the fatty acid sensing mechanism, taking into consideration the crosstalk between the central and peripheral tissues; (3) elucidate the interactions between lipids and other nutrients in the intermediary metabolism; (4) illustrate the potential roles of organelle dysfunction and intestinal flora imbalance in the development of lipid metabolism disorders; (5) interpret the impacts of high-lipid feeding on the energy sensing, health status, reproductive performance and flesh quality of aquatic animals; (6) find safe and effective nutritional interventions to attenuate lipid dyshomeostasis. All these efforts will guarantee the preciseness of lipid nutrition.

Guest Editor

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Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

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